IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Appln. Of

Inventor(s): Sugar et al. Group Art Unit: 2811

Application No.: 10/627,537 Confirmation No.: 3568

Filing Date: July 25, 2003 Attorney Docket No.: Cognio29US

Title: SYSTEM AND METHOD FOR MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) RADIO COMMUNICATION

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

Pursuant to the duty of disclosure requirements of 37 CFR 1.56, this Information Disclosure Statement is being submitted for entry in the above-identified application. It is being filed before the undersign's knowledge of the mailing of the first Office Action on the merits. Thus, no fee is believed due.

Attached is a form PTO-1449, together with copies of the cited references. The Examiner's consideration of the references is respectfully requested.

Respectfully submitted,

D. Andrew Floam
Reg. No. 34,597
(Customer Number 32604)
Date: January 16, 2004

Cognio, Inc.
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I, D. Andrew Floam, hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450 Alexandria, VA 22313-1450

January 16, 2004

FORM PTO-1449 (Modified)

COGNIO, INC.
101 ORCHARD RIDGE DRIVE, SUITE 350
GAITHERSBURG, MARYLAND 20878

LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: Cognio29US
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FOREIGN PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Country	Class/Subclass	Translation (Yes or No)
AA	WO02/03568 A1	01/10/2002	International	H04B 7/02	

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

*Examiner Initial	Author, Title, Date, Pertinent Pages, Etc
BA	Shtrom, et al., "Designing MIMO Systems for Reliable Coverage in Non-LOS Wireless Links," October 2002, www.rfdesign.com.
BB	Balaban et al., "Optimum Diversity Combining and Equalization in Digital Data Transmission with Applications to Cellular Mobile Radio-Part II: Numerical Results," IEEE Transactions on Communications, May 1992.
BC	Chuah et al., "Capacity of Multi-Antenna Array Systems in Indoor Wireless Environment," November 1998, IEEE Globecom.
BD	Love et al., "Equal Gain Transmission in Multiple-Input Multiple-Output Wireless Systems," November 2002, Proceedings of IEEE Globecom.
BE	Wolniansky et al., "V-BLAST: An Architecture for Realizing Very High Data Rates Over the Rich-Scattering Wireless Channel," Proceedings of ISSSE-98, September, 1998.
BF	Jakes, William C., "Microwave Mobile Communications," IEEE Press, 1974, pages 313-320, 489-498.
BG	Morgan, Samuel P. "Interaction of Adaptive Arrays in an Arbitrary Environment," The Bell System Technical Journal, January, 1965, pages 23-47.
BH	Yeh, Y.S. "An Analysis of Adaptive Retransmission Arrays in a Fading Environment," The Bell System Technical Journal, October, 1970, pages 1811-1825.
BI	"Lucent Technologies' Chips Poised to Bring "BLAST" Multiple Input/Multiple Output Technology to Laptops, PDAs and Other Mobile Devices," October 16, 2002, Lucent Technologies Press Release.
BJ	Yang et al., "On Joint Transmitter and Receiver Optimization for Multiple-Input-Multiple-Output (MIMO) Transmission Systems," December, 1994, IEEE Transactions on Communications, Vol. 42, No. 12, pages 3221-3231.

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BK	Ivrlac, Michel et al., "On Channel Capacity of Correlated MIMO Channels," ITG Fokusprojekt: Mobilkommunikation" Systeme mit intelligenten Antennen", Ilmenau, 2001.
BL	Meyer-Ottens, Sven et al., "Downlink Beamforming for W-CDMA Using Feedback and Interference Estimate," March 9, 2001
BM	Iserte, Antonio Pascual et al., "Pre-and Post-Beamforming in MIMO Channels Applied to HIPERLAN/2 and OFDM," IST Summit 2001 (IST Mobile Communications Summit), September, 2001.
BN	Lee, Dennis et al., "Antenna Diversity for an OFDM System in a Fading Channel," Proceeding of IEEE MILCOM 1999, November, 1999, pages 1104-1109.
BO	Iserte, Antonio Pascual et al., "Joint Beamforming Strategies in OFDM-MIMO Systems," ICASSP 2002 (IEEE International Conference on Acoustics, Speech and Signal Processing), May, 2002.
BP	Raleigh et al., "Spatio-Temporal Coding for Wireless Communication," IEEE Transactions on Communications, Vol 46., No. 3, March 1998, pp. 357-366.
BQ	Jungnickel et al., "A MIMO WLAN Based on Linear Channel Inversion," IEEE Seminar-MIMO Communication Systems from Concept to Implementation, December, 2001, pp. 20/1-20/6.
BR	Junqiang et al., "Spatial Multiuser Access with MIMO Smart Antennas for OFDM Systems," IEEE VTC 2001, September, 2001, pp. 1553-1557.
BS	Golden et al., "V-BLAST: A High Capacity Space-Time Architecture for the Rich-Scattering Wireless Channel," Bell Laboratories, Lucent Technologies, Proc. Int'l Symposium on Advanced Radio Technologies, September 10, 1998.
BT	Golden et al., "Detection Algorithm and Initial Laboratory Results Using V-BLAST space-time communication architecture," Electronic Letters, January 7, 1999, vol. 35, No. 1.
BU	BLAST High-Level Overview, Lucent Technologies, July 18, 2000.

EXAMINER **DATE CONSIDERED**

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s)